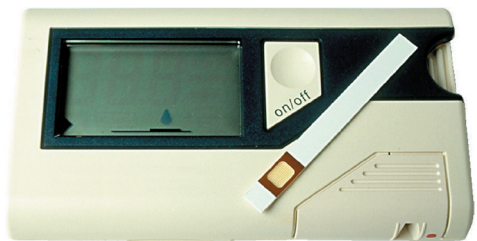


# Georgia Minority Health & Health Disparities Report

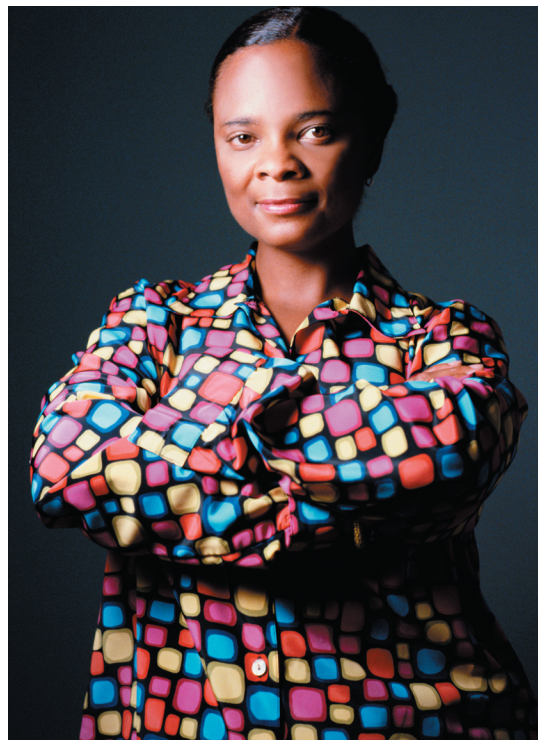


## The Unequal Burden

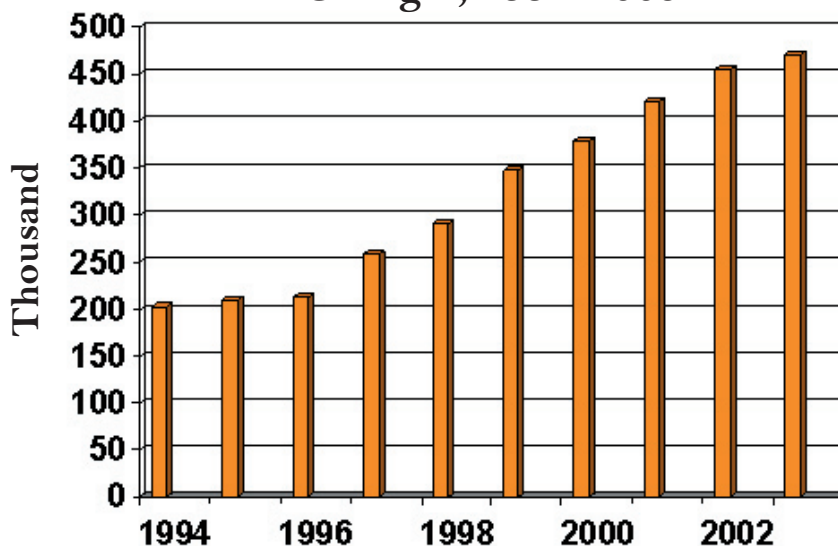
*Diabetes' impact  
growing unequally, but  
is often preventable*

In the 70s Gene Patton danced effortlessly to the delight of countless television viewers. Spins, pirouettes, and splits were all in his dancing repertoire. But while he used his body - specifically his legs - to entertain many, Patton was unknowingly living with diabetes.

"Black men just won't go to get tested," said the 72-year-old father of seven, who added that his physicians told him that he may have been living with the chronic disease for 10 to 15 years before his diagnosis. "We need to get involved [in our health]."



Number of Individuals Diagnosed with Diabetes  
in Georgia, 1994-2003

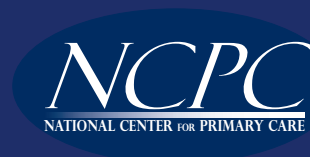


## Just the Facts

**\$700 million** in annual hospital charges in Georgia for diabetes-related hospitalizations and emergency department visits in 2002.



*This is the second in a series of 12 reports funded by the Georgia Office of Minority Health, Department of Community Health and written/released by the National Center for Primary Care at the Morehouse School of Medicine.*



## Just the Facts

**40,000** hospitalizations in Georgia in 2002 were diabetes related. Each hospital stay generated an average charge of \$16,862.

Emergency room visits alone account for over \$31 million per year in charges.

**\$1,000** is the average charge generated for each diabetes-related emergency department visit in Georgia in 2002.

**\$35 million** is generated per year by uninsured, self-pay, or indigent patients with diabetes and are likely to be unrecovered costs for the hospitals..

Diabetes is more common among African Americans than any other racial or ethnic group and more prevalent in the older population.

**64%** of blacks reported being overweight or obese compared to 57% whites and Hispanics.

**200,000+** are unaware of their diabetic status.

While African Americans make up only 29% of Georgia's population, they suffered roughly half of all diabetic leg amputations (47.5% compared to whites at 48.6%).

## Total Diabetes-Related Hospital Charges – Georgia, 2002

Type of Service	# of Episodes	Cost per Episode	Aggregate Costs, 2002
<i>All Patients, All Payors</i>			
ED Visits	25,073	\$1,250.70	\$31,358,800
Hospital Admissions	39,584	\$16,861.64	\$667,451,150
<b>TOTAL (All Patients, All Payors):</b>			<b>\$698,809,950</b>
<i>Uninsured / Indigent / Self-Pay Patients</i>			
ED Visits	3,928	\$1,054.57	\$4,142,350
Hospital Admissions	2,273	\$13,364.38	\$30,377,200
<b>TOTAL (Uninsured /Self-Pay Patients):</b>			<b>\$34,519,550</b>

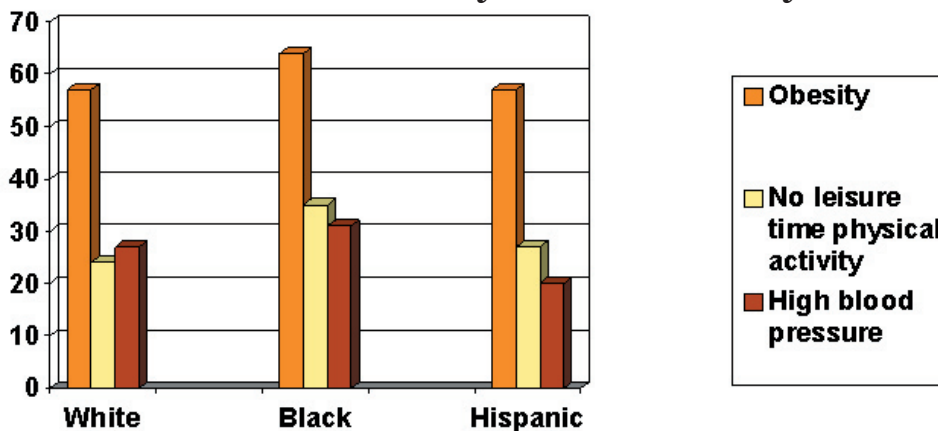
After the amputation of both legs and 32 years of insulin injection Patton continues to live his life to the fullest, engaging in photo shoots and handling the primary caretaking responsibilities for his 81-year-old wife. "I never allowed diabetes to get me down and that is how I make it daily," he said.

Diabetes mellitus is the sixth leading cause of death in both the United States and the state of Georgia. In the United States, 6.3% of the total population or 18.2 million people have diabetes; 13 million are diagnosed and 5.2 million individuals remain undiagnosed.

A chronic metabolic disorder that affects the way the body uses food for energy and growth, diabetes affects both the young and the old, with a greater prevalence in the elder (60+ years) population. As of 2002, in the U.S., 206,000 people under the age of 20 have diabetes, however in the past

twenty years, a disease known mostly to effect adults age 40 and over, has been increasing in children and adolescents. Children who develop type 2 diabetes are typically overweight or obese and have a family history of the disease. Most are American Indian, African American, Asian, or Hispanic/Latino. Eighteen million individuals over the age of 20 have diabetes and 8.6 million people over the age of 60 have diabetes. Risk factors for diabetes include family history, physical inactivity and obesity. Eighty-five percent of adults 20 years and older diagnosed with diabetes are overweight or obese with 54.8% being obese (NHANES data, 1999-2002 from the CDC). Complications of diabetes include heart disease, stroke, high blood pressure, retinopathy (blindness), kidney disease, amputations, neuropathy (nerve damage), dental disease, impotence, complications of pregnancy and

## Georgia's Prevalence Rates of Self-Reported Conditions/Behaviors by Race/Ethnicity, 2002



Source: 2002 Georgia Behavioral Risk Factors Surveillance System

susceptibility to infections. In 2002, the direct medical and indirect expenditures attributable to diabetes in the U.S. were estimated to be \$132 billion, with direct medical costs totaling \$91.8 billion. As with other chronic diseases, a heavier burden of diabetes is carried by racial and ethnic populations in the U.S. In 2002, 11.4% of non-Hispanic Black persons had diabetes compared to 8.4% of non-Hispanic Whites, i.e., non-Hispanic Blacks are 1.6 more times likely to have diabetes compared to non-Hispanic Whites. Latino individuals were 1.5 times more likely than non-Hispanic Whites to have diabetes, with those of Mexican origin, the largest Latino subgroup, over twice as likely to have diabetes than their non-Hispanic White counterparts. Other ethnic groups such as Asian Americans and Native Hawaiians and other Pacific Islanders who live in Hawaii are two times more likely to have diabetes compared to the White residents of Hawaii (prevalence data for Hawaiians and Asian Americans in general are limited); and American Indians and Alaska Natives who receive services

from the Indian Health Service (IHS) are 2.3 times more likely to have diabetes than their non-Hispanic White counterparts. In Georgia, over 7% of the adult population has been diagnosed with diabetes; that is 470,000 adults in 2003, compared to less than 4% of the population or 202,000 individuals in 1994. Over 200,000 additional Georgians are unaware of their diabetic status. In Georgia, the current statewide prevalence of type 2 diabetes in children is unknown but the obesity rate, a risk factor in type 2 diabetes development, has increased by 18% from 1990 to 2002. Thirty-three percent of middle school students are overweight or at risk for being overweight, 26% of high school students are overweight or at risk for being overweight, and 26% of low-income children ages 2-5 years old were overweight or at risk for being overweight. Georgia's hospitalizations are significantly impacted by diabetes related complications. Within the adult population, in 2000, 50% of lower extremity amputation hospitalizations

## Just the Facts

**35%** of blacks said they had no leisure time physical activity compared to 23.6% of whites and 26.8% Hispanics.

The death rate from diabetes for black women is more than two times higher than that of white women in Georgia.

For men in Georgia, black men die one and a half times more than white men from diabetes.

**\$4 billion+** per year, is the cost of diabetes due to medical care, lost productivity, and premature death in Georgia.

The morbidity rate, in Hispanics, due to diabetes nearly doubled (1.8 times) from 1999 to 2002.

**31%** of blacks were told they have high blood pressure compared to 26.3 whites and 19.5 Hispanics.

The morbidity rate for blacks is more than twice (2.3 times) that of whites and nearly doubled (1.6 times) for Latinos.

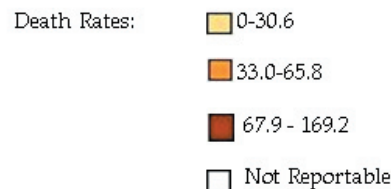
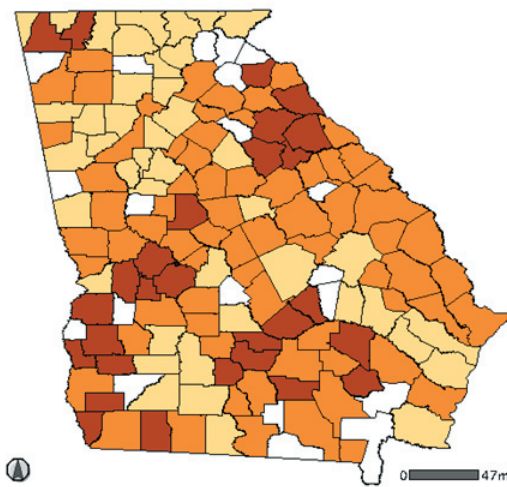
Ethnic and racial groups have a prevalence of diabetes that ranges from two to six times higher than their white counterparts.



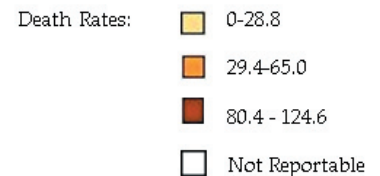
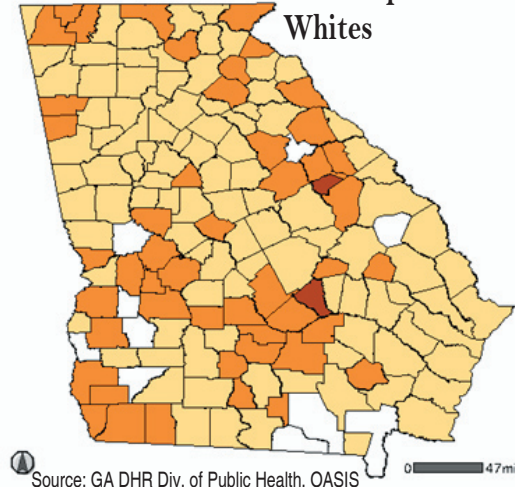
in Georgia were due to diabetes, 30% of cardiovascular disease hospitalizations were diabetes related, and 27% of end-stage renal disease hospitalizations had a secondary diagnoses of diabetes. Hospitalization costs due to diabetes has increased significantly over the past two years. In 2002, in Georgia, diabetes was the primary cause for nearly 40,000 hospitalizations, which totaled nearly \$700 million compared to 13,000 hospitalizations which totaled nearly \$138 million in 2000. The total cost of diabetes due to medical care, lost productivity, and premature death is over \$4 billion dollars per year. Similar to U.S. statistics, minority populations in Georgia carry a heavier burden related to diabetes, as shown by the high prevalence of diabetes and diabetic complications such as amputations, retinopathy, and neuropathy in these communities. In Georgia, ethnic and racial minority groups have a prevalence of diabetes that ranges from two to six times higher than their White counterparts. Diabetes is more common among Blacks than any other racial or ethnic group and more prevalent in the older population. Diabetes was the sixth leading cause of death for non-Hispanic Blacks compared to being the eighth leading cause of death for non-Hispanic Whites for 1999-2002 for the state of Georgia. The age adjusted death rate for non-Hispanic Blacks in Georgia is 2.2 times more than non-Hispanic Whites. The death rate from diabetes for Black women is more than two times higher

## Death Rates for Adults with Diabetes in Georgia by County, 1994-2002

### Non-Hispanic Blacks



### Non-Hispanic Whites



Source: GA DHR Div. of Public Health, OASIS

than that of White women in Georgia and for men, Black men die one and a half times more than White men from diabetes. The disparity in the burden of

the disease is also evidenced between the genders. The prevalence of diabetes is higher in women than in men and black women have a prevalence of diabetes



## Just the Facts

**470,000** adults or 7 % of Georgia's adult population were diagnosed with diabetes in 2003

that is nearly twice that of any other race/sex group and the morbidity rate for Blacks is more than twice (2.3 times) that of Whites. According to hospital discharge data from the Georgia Hospital Association, there were 741 leg amputations performed on diabetics in inpatient hospital settings in Georgia in 2002 and while African Americans make up only 29% of Georgia's population, they suffered roughly half of all diabetic leg amputations (47.5% compared to whites at 48.6%).

The diabetes disparities are well documented on the black- white axis, but become more challenging to measure for other minority and ethnic groups in Georgia. The morbidity rate in Hispanics due to diabetes nearly doubled (1.8 times) from 1999 to 2002 and is 1.6 times that of non-Hispanic Whites. Since 41% of Georgia's uninsured are

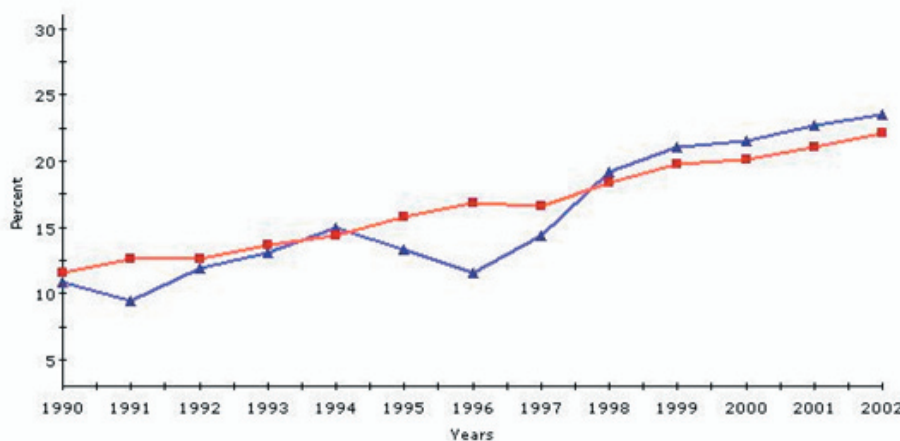
**New research shows that many complications of diabetes are preventable through self-management and an effective partnership with a personal primary care provider.**

Hispanic or Latino persons, it is safe to assume that these rates are actually higher, since this population may not access services and thus may have not been included in the data. Numbers are too small to measure accurate prevalence and complication rates on the Native American and Alaska Native and the Asian American and other Pacific Islanders population in the state of Georgia. Other indicators of the diabetes disparity are evidenced in the



**Obesity: By Body Mass Index  
Georgia vs. Nationwide**

— Georgia  
— Nationwide



self-reported health risk factors and complications of diabetes in Georgia's minority populations. According to the 2002 Georgia Behavioral Risk Factors Surveillance System, 64% of Georgia's Blacks reported being overweight or obese compared to 57% Whites and Hispanics. Thirty five percent of Blacks said they had no leisure time physical activity compared to 23.6% of Whites and 26.8% Hispanics, and 31% Blacks were told they have high blood pressure compared to 26.3% Whites and 19.5% Hispanics.

## Just the Facts

**13,000** hospitalizations in 2000 had a primary cause of diabetes, accounting for \$138 million.

## Conclusions & Recommendations

- State diabetes surveillance systems should collect type 2 diabetes trends and complication rates among other minority and ethnic groups in addition to non-Hispanic Blacks including the children and adolescent (<20 years old) population.
- Rising rates of obesity, caloric consumption, and sedentary lifestyle all translate into increasing diabetes rates in all age groups. Programs to promote behavior change toward healthier lifestyles are needed, including mandatory daily physical activity in all public schools.
- Diabetes screening and detection programs should target Georgia's racial and ethnic minority populations to identify those with undiagnosed diabetes.
- Programs, coverage, and financing are needed to assure that all diabetics in Georgia receive the on-going screening and treatment necessary to prevent complications such as kidney failure, blindness, nerve damage, cardiovascular disease, and amputations.
- Depression is a common co-existing illness with diabetes – both must be accurately diagnosed and effectively treated to assure optimal outcomes.
- Because diabetes control requires effective self-management, behavior change, and an on-going partnership with health professionals, we must assure access to culturally and linguistically appropriate services, with proportionate representation by health professionals who reflect the diversity of Georgia's population.

## Just the Facts

### Preventing *Diabetes* Complications

- Manage your diet & exercise regularly
- Work with your health care providers but take personal responsibility for controlling your ABC's:  
A = Hemoglobin A<sub>1</sub>C, a test for blood sugar control  $\leq 7$   
B = Blood Pressure  $\leq 130/80$   
C = Cholesterol (LDL  $\leq 100$ )
- Have regular eye exams
- Check your feet daily for sores or callouses and ask your doctor to check for nerve damage
- Get the pneumonia vaccine at least once and the flu shot every year.
- Have your urine checked for microalbuminuria (small amounts of protein) every year.



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